



New Solar Homes Partnership (NSHP) Training Workshop

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San Diego, CA
March 8, 2010



Purpose

- Provide assistance to all parties participating in the NSHP program
 - Application Process
 - Required Documents
- Any comments or suggestions on improving the NSHP program can be sent to the California Energy Commission's Renewable Energy Office at renewable@energy.state.ca.us



California Solar Initiative



CPUC's
California Solar
Initiative

1,940 MW

\$2.16 B

**CEC's New
Solar Homes
Partnership**

400 MW

\$400 M

Publicly-Owned
Utility Solar
Programs

700 MW

\$784 M





New Solar Homes Partnership Program Goals

- Establish a self-sufficient solar industry where solar energy systems are a mainstream viable option for homes by 2016
- Achieve 400 megawatts of installed solar electric capacity in California by the end of 2016
- Place solar energy systems on 50% of new homes by end of program



New Solar Homes Partnership Program Eligibility

- Project located in one of four investor-owned electric service territories (PG&E, SCE, SDG&E, BVES)
- New residential construction project
- Project meets a minimum of 15 percent beyond current Building Energy Efficiency Standards (Title 24)



New Solar Homes Partnership Program Eligibility

- Solar energy system will be at least 1 kW AC or larger and interconnected with the utility grid.
- The electricity from the system will offset the end-use customer's electric load.
- The system will be composed of new certified components from the Energy Commission's Lists of Eligible Equipment and will be covered by a 10-year warranty.



New Solar Homes Partnership Program Eligibility

- Contractors installing solar systems must have a California State A, B, C-10 or C-46 license. Solar systems can also be self-installed.
- Systems and energy efficiency measures are third-party verified.



Incentive Structure

- One-time, upfront incentive
- Incentives decline as megawatt targets are achieved
- Incentives decline to zero at the end of the program
- <https://www.newsolarhomes.org/RebateLevels.aspx>



Expected Performance-Based Incentive

- The incentive amount is calculated using the CEC-PV Calculator
- The incentive amount is based on a calculation which compares the expected performance of the proposed system to a reference system



Incentive Levels

Solar As Standard Feature Incentive - \$2.60/watt

- Projects with six or more units where solar is installed on 50 percent or more of the units.
- 36-month reservation period

Base Incentive - \$2.50/watt

- Custom homes
- Small developments
- Developments offering solar as an option*
- Developments where solar is installed on less than 50 percent of the units
- Common areas
- 18-month reservation period

*Solar as an Option projects will receive a 36-month reservation period.



Incentive Levels – Affordable Housing

- \$3.50/watt for residential unit installations
- \$3.30/watt for common area installations
- 36-month reservation period
- Incentives decline over time as affordable housing megawatt targets are achieved (Decline schedule is separate from market-rate NSHP program)
- No specific set-aside of funding for affordable housing
- Additional requirements must be met in order to receive the higher incentive levels.



Applicability of Guidebook Changes to Existing Applications

- Approved applications as of the Guidebook adoption date, follow the previous editions of the Guidebook, but allowed to abide by the third edition in the following ways:
 - Enter into lease/PPA arrangements in accordance to eligibility in Guidebook
 - Increase system size, but incentive capped at 7.5 kW
 - Not submit final invoice, interconnection letter, final solar permit signoff, HERS documents



Applicability of Guidebook Changes to Existing Applications

- Applications that were submitted but not approved at the time of the Guidebook adoption, can abide by either the second or the third edition of the Guidebook
 - Written notification must be submitted.
- New applications submitted after the Guidebook adoption will abide by the third edition.



Leased Systems

NSHP Guidebook, 2nd Ed.

- Silent on the issue of system ownership

NSHP Guidebook, 3rd Ed.

- At a minimum, ten-year leased systems and power purchase agreements
- Lessor required to report the status of the system for the first five years
- If agreement is terminated AND system is removed within the first five years, then penalties for early removal



Solar as an Option

NSHP Guidebook, 2nd Ed.

- Only encumbers funds for 10 percent of a housing development
- Requires specific solar and energy efficiency information at reservation time
- 18-month reservation period

NSHP Guidebook, 3rd Ed.

Allow up to 50 percent of a housing development to participate

General approval at reservation time, encumber funds at base incentive level for 2 kW system

Require specific solar and energy efficiency information once home is identified

Requires applicant to provide project status update 18 months into reservation

36-month reservation period



Housing Phases

NSHP Guidebook, 2nd Ed.

- Only housing developments that commit 50 percent or more of the homes to solar can receive the solar-as-standard incentive.

NSHP Guidebook, 3rd Ed.

- Allow phases of 6 or more homes that commit 50 percent or more of the homes to solar to receive the solar-as-standard incentive.



System Upgrades

NSHP Guidebook, 2nd Ed.

- If the installed system is larger than the one that was proposed at reservation time, the incremental increase in system size is calculated at the incentive level in effect at the time of the modification.

NSHP Guidebook, 3rd Ed.

- If the installed system is larger than the one that was proposed at reservation time, the incremental increase in system size is calculated at the incentive level in effect at the time of reservation approval.



Incentive Cap

NSHP Guidebook, 2nd Ed.

- All system sizes are eligible for the incentive
- Systems larger than 5 kW must provide a system size justification letter or load calculations, explaining why the project requires a large system.

NSHP Guidebook, 3rd Ed.

- Incentives are for the first 7.5 kW AC of a system installed on a residential dwelling unit
- No system size justification required



Cal Flex Install Criteria

NSHP Guidebook, 2nd Ed.

- To use the CFI, tilt ranges from 1:12 to 7:12 (i.e., 4.8 to 30.3 degrees)

NSHP Guidebook, 3rd Ed.

- Include flat installations in tilt range (0 degrees)
- CFI can only be used for new residential developments.
- CECPV Calculator Version 2.4



Energy Efficiency Tiers

NSHP Guidebook, 2nd Ed.

2005 Building Energy Efficiency Standards Tier levels

- Tier 1: minimum 15 percent beyond Standard for combined space heating, cooling and water heating
- Tier 2: minimum 35 percent beyond Standard for combined space heating, cooling and water heating and 40 percent for space cooling

NSHP Guidebook, 3rd Ed.

Includes specifics on 2008 Building Energy Efficiency Tier levels

- Tier 1: minimum 15 percent beyond Standard for combined space heating, cooling and water heating
- Tier 2: minimum 30 percent beyond Standard for combined space heating, cooling and water heating and 30 percent for space cooling
- 2005 still eligible, if applicable



Affordable Housing

NSHP Guidebook, 2nd Ed.

- Only new affordable housing permitted in program (i.e., solar permit pulled before occupancy permit issued)
- Projects must be affordable for a minimum of 45 years

NSHP Guidebook, 3rd Ed.

- Allow projects with occupancy permits less than two years old to apply
- Projects must be affordable for a minimum of 10 years



Affordable Housing (Cont'd)

NSHP Guidebook, 2nd Ed.

- Silent on virtual net metering
- Energy efficiency documentation required at reservation time

NSHP Guidebook, 3rd Ed.

- Projects utilizing virtual net metering are eligible to apply
- Allow TCAC applicants up to 60 days after funding approval to submit energy efficiency documentation



Program Clarifications

- A residential building is considered “new” if the entire building structure is subject to current Title 24 Standards and does not yet have a certificate of occupancy.
- Solar permit should be pulled prior to the issuance of the certificate of occupancy, but no later than 60days* after.
- Projects with valid, unexpired reservations as of January 1, 2010 are granted automatic extensions.
- Retailers and installers self-register with the Energy Commission via Go Solar California website
- Guidebook explicitly states that all energy efficiency measures installed to meet the minimum requirements will be inspected via CF-4R-NSHP form.
- Applicant can designate his administrative rights to a representative.



FAQ's

- What's the current incentive level?
 - <https://www.newsolarhomes.org/RebateLevels.aspx>
- How many MW's have been reserved/are under review?
- How will I know when the incentive level will drop?
- Where should I send my reservation package and payment claim package?
 - <http://www.gosolarcalifornia.ca.gov/contactus.html>



FAQ's

- What if my reservation has expired?
- How does a retailer get added to the online registered retailer list?
 - <http://www.gosolarcalifornia.ca.gov/database/addcompany.php>
- When will the next training be held?
 - <http://www.gosolarcalifornia.ca.gov/nshp/training/index.html>
- Other questions?



Additional NSHP Resources


www.gosolarcalifornia.org

Go Solar California! - Windows Internet Explorer

http://www.gosolarcalifornia.ca.gov/

Go Solar California!

Existing Homes New Homes Nonresidential Builders Installers News Room Calendar Search Site



Most Popular Links

- ♦ [Solar Contractors, Installers & Retailers Database](#)
- ♦ [Calendar](#)
- ♦ [CSI Information](#)
- ♦ [Documents & Handbooks](#)
- ♦ [Eligible Equipment](#)
- ♦ [Find Your Utility](#)
- ♦ [NSHP Communities](#)
- ♦ [NSHP Guidebook & Forms](#)
- ♦ [Solar for Affordable Housing](#)
- ♦ [Solar for Existing Homes - CSI](#)
- ♦ [Solar for New Homes - NSHP](#)
- ♦ [Solar 101 \(All About Solar Energy\)](#)


Residential Solar Info

- ♦ [Solar for EXISTING Homes](#)
- ♦ [Solar for NEW Homes](#)
- ♦ [Info for Builders & Developers](#)
- ♦ [Solar Contractors, Installers & Retailers Database](#)

Nonresidential Solar Info


- ♦ [Agriculture](#)
- ♦ [Commercial Buildings](#)
- ♦ [Industrial Buildings](#)
- ♦ [Local Government](#)
- ♦ [Nonprofit Organizations](#)
- ♦ [Solar Schools](#)
- ♦ [Calif. Energy Performance](#)

Welcome to the Go Solar California website brought to you by California's Public Utilities Commission and Energy Commission. This site provides consumers a "one-stop shop" for information on rebates, tax credits, and incentives for solar energy systems in California.



Solar for Your Home

You can use the power of the sun, along with energy efficiency in your home, to help reduce your electricity bills by up to 60 percent or more! Find out about incentives for installing solar on your existing home or about buying a new home in one of California's solar communities. [MORE...](#)



Builders, Developers, and Installers

If you're a builder or developer, are building your own home, or are a solar installer, find the information that's right for you on our [Solar Industry Page](#).



Additional NSHP Resources

<http://www.gosolarcalifornia.ca.gov/nshp/training/index.html>

New Solar Homes Partnership Training - Windows Internet Explorer

http://www.gosolarcalifornia.ca.gov/nshp/training/index.html

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GO solar CALIFORNIA Contribute to a better quality of life!

CENTEX HOMES

NSHP Links

- NSHP Main Page
- Plan for Energy Efficiency First
- NSHP Calculator
- NSHP Eligible Equipment
- NSHP Guidebook
- NSHP Workshops & Training
- Eligible Utilities
- NSHP Advisory Committee
- Contact Us

Go Solar E-Mail List Server

To subscribe to our Go Solar e-mail ListServer, enter your e-mail address completely:

Note: Your e-mail address must be exact and complete. Incorrect or incomplete addresses will not work. You will receive a welcoming e-mail to confirm your subscription.

New Solar Homes Partnership Training

Training Events

March 08, 2010
New Solar Homes Partnership Training Workshop at San Diego Gas & Electric

March 09, 2010
New Solar Homes Partnership (NSHP) Training Session at Southern California Edison

March 11, 2010
California Energy Commission will hold an online training workshop (via WebEx) on the NSHP web tool

March 15, 2010
PG&E New Solar Homes Partnership Training Workshop

WebEx instructions are now available through the workshop link above.

WebEx Tutorial Training Files

The New Solar Homes Partnership provides online training through WebEx tutorials. These tutorials were created as an additional training aid for the NSHP Web Tool application process. Please refer to the NSHP Guidebook and NSHP Help Manual for additional detailed information.

Please note: No software is needed! The WebEx player is automatically installed when you click the link to begin playback. Problems with playback? Please contact WebEx technical support at 1 866-229-3239.

Date	Title	Duration
10/23/08	Introduction to the Web Tool	00:42
10/24/08	Getting Started	02:52



Additional NSHP Resources

- NSHP CECPV Calculator
 - <http://www.gosolarcalifornia.ca.gov/nshpcalculator/index.html>
- NSHP Web Tool
 - <https://www.newsolarhomes.org>
- Register for the GoSolar Retailer/Installer List
 - <http://www.gosolarcalifornia.ca.gov/database/addcompany.php>



Contact Information

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New Solar Homes Partnership

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